

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-6 have been amended and claims 7-10 have been added as follows:

Listing of Claims:

Claim 1 (currently amended): A heat insulating plunger sleeve for use in die casting machines which comprises a hollow cylinder provided at a base end thereof with a molten metal outlet $[(13)]$ adapted to communicate with a die $[(80)]$ and connecting means $[(16)]$ connectable to the die $[(80)]$, the hollow cylinder having an opening $[(14)]$ at an outer end thereof for a plunger tip $[(70)]$ to be inserted thereinto and a molten metal inlet $[(15)]$ formed in a peripheral wall thereof for injecting a molten metal into the cylinder therethrough,

the plunger sleeve being characterized in that the sleeve comprises a first metal layer $[(20)]$ made of a metal having high heat resistance and providing an inner periphery of the sleeve, a second metal layer $[(40)]$ providing an outer periphery of the sleeve, and a ceramic layer $[(30)]$ formed between the first metal layer $[(20)]$ and the second metal layer $[(40)]$, the ceramic layer $[(30)]$ comprising a ceramic powder and/or a ceramic fiber consolidated to at least 50% to not greater than 90% in relative density.

Claim 2 (currently amended): The heat insulating plunger sleeve for use in die casting machines according to claim 1 wherein the second metal layer $[(40)]$ comprises a plurality of metal layers $(41), (41)$, and a ceramic layer $[(30)]$ comprising a ceramic powder and/or a ceramic fiber consolidated to at least 50% to not greater than 90% in relative density is positioned between the

metal layers ~~(41), (41)~~.

Claim 3 (currently amended): The heat insulating plunger sleeve for use in die casting machines according to claim 1 [[or 2]] wherein each of the ceramic layers ~~[(30)]~~ is up to 2 mm in thickness.

Claim 4 (currently amended): The heat insulating plunger sleeve for use in die casting machines according to claim ~~[[1 or]]~~ 2 wherein ~~the first metal layer (20) is 3 to 15 mm in thickness~~ each of the ceramic layers is up to 2 mm in thickness.

Claim 5 (currently amended): The heat insulating plunger sleeve for use in die casting machines according to claim 1 [[or 2]] wherein the first metal layer ~~(20) comprises, in % by weight, 0.32 to 0.42% of C, 0.8 to 1.2% of Si, up to 0.5% of Mn, 4.5 to 5.5% of Cr, 1.0 to 1.6% of Mo, 0.5 to 1.2% of V and the balance substantially Fe~~ is 3 to 15 mm in thickness.

Claim 6 (currently amended): The heat insulating plunger sleeve for use in die casting machines according to claim ~~[[1 or]]~~ 2 wherein ~~each of the ceramic layers 30) comprises at least one powder or fiber selected from the group consisting of Al_2O_3 , $\text{Al}_2\text{O}_3\text{-SiO}_2$, ZrO_2 , SiO_2 , Si_3N_4 , BN, TiB_2 , SiC and MoSi_2~~ the first metal layer is 3 to 15 mm in thickness.

Claim 7 (new): The heat insulating plunger sleeve for use in die casting machines according to claim 1 wherein the first metal layer consists essentially of, in % by weight, 0.32 to 0.42% of C, 0.8 to 1.2% of Si, up to 0.5% of Mn, 4.5 to 5.5% of Cr, 1.0 to 1.6% of Mo, 0.5 to 1.2% of V and the balance substantially Fe.

Claim 8 (new): The heat insulating plunger sleeve for use in die casting machines according to claim 2 wherein the first metal layer consists essentially of, in % by weight, 0.32 to 0.42% of C,

0.8 to 1.2% of Si, up to 0.5% of Mn, 4.5 to 5.5% of Cr, 1.0 to 1.6% of Mo, 0.5 to 1.2% of V and the balance substantially Fe.

Claim 9 (new): The heat insulating plunger sleeve for use in die casting machines according to claim 1 wherein each of the ceramic layers comprises at least one powder or fiber selected from the group consisting of Al_2O_3 , $\text{Al}_2\text{O}_3\text{-SiO}_2$, ZrO_2 , SiO_2 , Si_3N_4 , BN, TiB_2 , SiC and MoSi_2 .

Claim 10 (new): The heat insulating plunger sleeve for use in die casting machines according to claim 2 wherein each of the ceramic layers comprises at least one powder or fiber selected from the group consisting of Al_2O_3 , $\text{Al}_2\text{O}_3\text{-SiO}_2$, ZrO_2 , SiO_2 , Si_3N_4 , BN, TiB_2 , SiC and MoSi_2 .